

**WHAT IS CLAIMED IS:**

1. A method for manufacturing a light emitting diode, comprising steps of:  
providing a growing substrate;  
forming a semiconductor structure on said growing substrate;  
forming a metal bonding layer on said semiconductor structure;  
bonding a transparent substrate to said semiconductor structure via said metal bonding layer;  
removing said growing substrate; and  
forming a first electrode and a second electrode on said semiconductor structure and said transparent substrate respectively.
2. The method as claimed in claim 1, wherein said growing substrate is a GaAs substrate.
3. The method as claimed in claim 1, wherein said semiconductor structure is a light emitting diode structure.
4. The method as claimed in claim 3, wherein said light emitting diode structure is formed by a four-element material of AlGaInP.
5. The method as claimed in claim 1, wherein said metal bonding layer is one selected from a group consisting of an AuBe, an AuSn, an AuGe, an AuNi, and an AuZn thin films.
6. The method as claimed in claim 1, wherein said transparent substrate is one selected from a group consisting of a GaP, a SiC, an AlAs, an AlGaAs and a diamond substrates.
7. The method as claimed in claim 1, wherein said transparent substrate is preferably a GaP substrate.
8. The method as claimed in claim 1, wherein said bonding step is performed at a bonding temperature ranged from 300°C to 900°C.

9. The method as claimed in claim 1, wherein said bonding step is performed at a bonding pressure ranged from 500 pounds to 5000 pounds.

10. The method as claimed in claim 1, wherein said first electrode and said second electrode are respectively a P-type electrode and an N-type electrode.

11. The method as claimed in claim 1, wherein said first electrode and said second electrode are respectively an N-type electrode and a P-type electrode.

12. A light emitting diode, comprising:

a semiconductor structure for emitting light;

a transparent substrate formed on said semiconductor structure via a metal bonding layer between said semiconductor structure and said transparent substrate; and

a first electrode and a second electrode respectively formed on said semiconductor structure and said transparent substrate for providing a current to said semiconductor structure.

13. The light emitting diode structure as claimed in claim 12, wherein said semiconductor structure is a light emitting diode structure.

14. The light emitting diode structure as claimed in claim 13, wherein said light emitting diode structure is formed by a four-element material of AlGaInP.

15. The light emitting diode structure as claimed in claim 12, wherein said transparent substrate is one selected from a group consisting of a GaP, a SiC, an AlAs, an AlGaAs and a diamond substrates.

16. The light emitting diode structure as claimed in claim 12, wherein said transparent substrate is preferably a GaP substrate.

17. The light emitting diode structure as claimed in claim 12, wherein said metal bonding layer is one selected from a group consisting of an AuBe, an AuSn, an AuGe, an AuNi, and an AuZn thin films.

18. The light emitting diode structure as claimed in claim 12, wherein said metal bonding technology is performed at a bonding temperature ranged from 300°C to 900°C.

19. The light emitting diode structure as claimed in claim 12, wherein said metal bonding technology is performed at a bonding pressure ranged from 500 pounds to 5000 pounds.

20. The light emitting diode structure as claimed in claim 12, wherein said first electrode and said second electrode are respectively a P-type electrode and an N-type electrode.

21. The light emitting diode structure as claimed in claim 12, wherein said first electrode and said second electrode are respectively an N-type electrode and a P-type electrode.